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1. (currently amended) A method of storing a number of data bits of a secondary channel (30) in the frame of a main channel (20) comprising a fixed number of main channel bits and a frame synchronization signal, characterized in

- that a secondary frame (11) is formed having a fixed number of frame bits, which frame bits are successively filled with
  - a number of data bits (113),
  - an end-bit (114), which is set to a first bit-value, and
  - filling bits (115), if any, which are set to a second bit-value,

wherein the number of data bits (113) is dependent on and smaller than the random number (n_j) of bits being available in the frame of the main channel (20) for storage of bits of the secondary channel (30),

- that the secondary frame (11) is then encoded using an error correction encoder (39) producing encoded data bits (113) and parity bits (112) and
- that the encoded data bits (113) and parity bits (112) are embedded in the frame of the main channel (20).

2. (original) A method as claimed in claim 1, characterized in that several secondary frames (11) are combined forming a superframe (5), that the data bits (8) of the superframe (5) are encoded using the error correction encoder (39) and that the symbols (S11, S12, S13; S21, S22, S23) of resulting codewords are distributed in the superframe (5) before embedding them in the frames of the main channel (20).

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3. (original) A method as claimed in claim 1, characterized in that after arranging the data bits (113) in the secondary frame (11) an id-bit (111) is set and associated with the secondary frame (11) dependent on the number (n_j) of bits available for storage of bits of the secondary channel (30) in the frame of the main channel (20).

4. (currently amended) A method as claimed in claim 1, characterized in

- that the encoded data bits (113) and the parity bits (112) are embedded in the frame of the main channel (20) via multi-level coding, that multi-level coding is applied for runlengths In_{min} or greater, in which n_{min} is a predetermined value, and
- that the number of data bits (113), which can be stored in a frame of the main channel (20), depends on the number of symbols in the frame having a runlength In_{min} or greater.

5. (currently amended) A method of decoding a stream of bits relating to a secondary channel (30) being embedded in the frames of a main channel (20) into a stream of data bits (62), characterized in

- that a secondary frame (11) is formed having a fixed number of frame bits, that all bits (112, 113) being embedded in a frame of the main channel (20), an end-bit (114), which is set to a first bit-value, and filling bits (115), if any, which are set to a second bit-value, are successively arranged in the secondary frame (11) and
- that the secondary frame (11) is then decoded using an error correction decoder (59) thereby producing the data bits (62).

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6. (original) A method as claimed in claim 5, characterized in that the random number (n_j') of bits of the secondary channel (30) being embedded in the frame of the main channel (20) is determined by the error correction decoder (59).

7. (original) A method as claimed in claim 5, characterized in that an id-bit (111), which is set and associated with each secondary frame (11) during the storage of the bits of the secondary channel (30) and which is dependent on the number of bits (n_j) available for storage of bits of the secondary channel (30) in the frame of the main channel (20), is used to check the number (n_j') of bits of the secondary channel (30) being embedded in the frame of the main channel (20).

8. (original) A method as claimed in claim 5, characterized in that the data bits (62) are found in the decoded secondary frame (11) by looking for the end-bit (114) in the decoded secondary frame (11) which is the last bit set to a first bit-value in the decoded secondary frame (11).

9. (original) A method as claimed in claim 5, characterized in that several secondary frames (11) are combined forming a superframe (5) and that the superframe (5) is decoded using the error correction decoder (59).

10. (previously presented) A method as claimed in claim 1, characterized in that the end-bit (114) is set to one and the filling bits (115) are set to zero.

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11. (currently amended) A device for storing a number of data bits of a secondary channel (30) in the frame of a main channel (20) comprising a fixed number of main channel bits and a frame synchronization signal, which device comprises storing means (71, 43), characterized in that the storing means (71, 43) are conceived

- to form a secondary frame (11) having a fixed number of frame bits, to fill the frame bits successively with
  - a number of data bits (113),
  - an end-bit (114), which is set to a first bit-value, and
  - filling bits (115), if any, which are set to a second bit-value,

wherein the number of data bits (113) is dependent on and smaller than the random number (n_j) of bits being available in the frame of the main channel (20) for storage of bits of the secondary channel (30),

- to encode the secondary frame (11) using an error correction encoder (39) producing encoded data bits (113) and parity bits (112) and
- to embed the encoded data bits (113) and parity bits (112) in the frame of the main channel (20).

12. (currently amended) A device for decoding a stream of bits relating to a secondary channel (30) being embedded in the frames of a main channel (20) into a stream of data bits, which device comprises decoding means (84), characterized in that the decoding means (84) are conceived

- to form a secondary frame (11) having a fixed number of frame bits,

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- to successively arrange all bits (112, 113) being embedded in a frame of the main channel (20), an end-bit (114) which is set to a first bit-value, and filling bits (115), if any, which are set to a second bit-value, in the secondary frame (11) and
- to decode the secondary frame (11) using an error correction decoder (59) thereby producing the data bits (62).

13. (currently amended) A medium storing a number of data bits of the secondary channel (30) in the frame of a main channel (20) comprising a fixed number of main channel bits and a frame synchronization signal,

characterized in that

a secondary frame (11) is formed having a fixed number of frame bits, which frame bits are successively filled with

a number of data bit (113),

and end-bit (114), which is set to a first bit-value, and

filling bits (115), if any, which are set to a second bit-value,

wherein the number of data bits (113) is dependent on and smaller than the random number (n_j) of bits being available in the frame of the main channel (20) for storage of bits of the secondary channel (30),

the secondary frame (11) being encoded using an error correction encoder (39) producing encoded data bits (113) and parity bits (112), which encoded data bits (113) and parity bits (112) are embedded in the frame of the main channel (20).

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14. (currently amended) A signal including a number of data bits of the secondary channel (30) in the frame of a main channel (20) comprising a fixed number of main channel bits and a frame synchronization signal,

characterized in that

a secondary frame (11) is formed having a fixed number of frame bits, which frame bits are successively filled with

a number of data bit (113),

and end-bit (114), which is set to a first bit-value, and

filling bits (115), if any, which are set to a second bit-value,

wherein the number of data bits (113) is dependent on and smaller than the random number (n_j) of bits being available in the frame of the main channel (20) for storage of bits of the secondary channel (30),

the secondary frame (11) being encoded using an error correction encoder (39) producing encoded data bits (113) and parity bits (112), which encoded data bits (113) and parity bits (112) are embedded in the frame of the main channel (20).

15. (new) A method for storing supplemental data of a secondary channel, the method comprising performing operations in at least one data processing device, the operations comprising:

- receiving main data from a main channel organized into frames, each frame having a number of free bits;

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- selecting from the supplemental data a plurality of one-dimensional sub-arrays, a size of each one-dimensional sub-arrays being dependent on the number of free bits in a current frame of the main channel;
- subjecting each one-dimensional sub-array to a respective encoding process, separate from any coding of the main data to protect against data loss to yield a respective encoded one-dimensional sub-arrays;
- inserting the encoded one-dimensional sub-arrays into a respective plurality of frames of the main data to create combined frames;
- reorganizing at least some of the combined frames into at least one superframe, each superframe comprising a two dimensional array of the supplemental data spread across its frames as encoded one-dimensional sub-arrays; and
- storing the superframe.

16. (new) The method of claim 15, further comprising, prior to storing, subjecting the combined frames or the superframes or both to additional coding, to protect against data loss.

17. (new) The method of claim 15, wherein the supplemental data comprises sections having respective run-lengths, the organizing operation further comprises, in order not to split a section between distinct one-dimensional sub-arrays, inserting at least one fill bit into at least one of the one-dimensional sub-arrays.

18. (new) The method of claim 15, wherein each one-dimensional sub-array comprises an end bit.

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19.(new) A method as claimed in claim 5, characterized in that the end-bit (114) is set to one and the filling bits (115) are set to zero.